

## Second round comments from the Ad-hoc review committee (Maurik Holtrop, Kevin Giovanetti, Zein-Eddine Meziani)

October 15, 2018

Dear Mohammad Hattawy,

We have read the updated version of the paper and find it significantly improved over the first version we read. There are still some comments we think you should address:

The new plot of the data versus  $t$  shows far more clearly the point you are trying to make about possible modification of the struck proton in  $^4\text{He}$ . We are a bit concerned however that it would not be clear to the reader that there is significant expected smearing of the  $t$  variable due to the Fermi motion of the initial proton. The question we have is whether horizontal error bars on your plot, which would include the bin width effects and the smearing of the  $t$  variable, could be added to make this explicitly clear to the reader.

We used the kinematics of the photons to determine  $t$  specifically in order to avoid such uncertainty linked to the initial proton kinematics (see Appendix H of the analysis note for details). However, the paper was unclear on the topic, we have changed Fig 1 and added a statement line 160-163 to clarify this in the new version.

There are still a number of English language issues in the paper:

1. Abstract: "The  $Q^2$ ,  $x_b$  and  $t$  dependencies .... are compared with the one on the free proton": Since dependencies is plural, replace "the one" with "those".  
Corrected.
2. Line 150: greater the 1 GeV -> greater than 1 GeV.  
Corrected.
3. Line 152: formula would be  $W^2 = (q + p)^2$ , or else take square root.  
Corrected.
4. Line 218,219: Three times misspelling of "integrated"  
Corrected.
5. Line 231: dependencies -> dependency  
Corrected.
6. Line 240: such as long-range interactions -> such as long-range interactions and final state interactions of the knock-out proton.  
Corrected.

7. line 273: Sentence should be rewritten. Minimal suggestion: "This surprising result opens a new avenue for progress in understanding the properties of quarks and gluons in the nuclear medium."  
[Corrected.](#)
8. Caption to Figure 5: On the bottom -> On the bottom plot: (positron beam was used) -> (a positron beam was used)  
[Corrected.](#)
9. References: line 343: Accent on name: R. Dupré.  
[Corrected.](#)